

# **DRI-PATCH UA-80**

## Underwater application epoxy adhesive & patching mortar

2-component, underwater epoxy adhesive and repair mortar. Specifically designed to bond to most substrates such as concrete, stones, steel, iron, epoxy, glass, wood, polyester, fiber cement board, etc.

Commonly used as a structural adhesive and mortar for sea walls refurbishments, submerge steel works or concrete repairs, fixing slip bricks, tiles or tiles pointings.

### FEATURES/BENEFITS

- ✓ Underwater application
- ✓ Easy to mix & apply
- ✓ Ultra-high bond, no sag in vertical application, & hardens without shrinkage
- Impermeable to liquids & water vapor with good chemical resistance
- ✓ No primer needed
- ✓ Fast curing
- ✓ High initial & ultimate mechanical strength

## **APPLICATION AREAS**

Used as adhesive & mortar for:

- ✓ Concrete elements
- Natural stones, ceramic, fiber cement, bricks, masonry
- ✓ Steel, iron, aluminum
- ✓ Glass, tiles
- ✓ Polyester, epoxy substrate
- Patching of holes, void filling
- ✓ Joint filling & crack sealing
- ✓ Joint & crack edge repair



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#### Product Data

Appearances / Colors	A+B mixed: Grey
Packaging	1.2kg/set, 5kg/set
Storage	12 Months from date of production
Storage Condition	Dry conditions at Temperature between 5-35 °C

#### **General Information**

Origin	Epoxy Resin	
Density	~1.6kg/l at +23 °C	
Change in volume	No shrinkage	
Setting time	30minutes @ 23 °C	10mm
Curing Time	Initial 24hours @ 23 °C	
	Final 7days @ 23 °C	
Pot life	20-30minutes @ 23 °C	

#### **Technical Data**

Description	1 Day	3 Days	7 Days
Compressive Strength (N/mm <sup>2</sup> ) [BS 6319 Part 2: 1983]	50-55	60-65	63-70
Flexural Strength (N/mm <sup>2</sup> )	20-30	25-35	30-35
Tensile strength (N/mm <sup>2</sup> )	9-12	10-14	10-14
Bond Strength	1 Day		3 Days
Concrete dry (N/mm <sup>2</sup> )	>4.0		>4.0
Concrete moist (N/mm <sup>2</sup> )	>4.0		>4.0
Steel (N/mm²)	>6.0		>13.0

\*100% concrete cohesion failure.

#### **SUBSTRATE**

New concrete should be cured for at least 28 days and should have a Pull off strength  $\geq$  1.5 N/mm<sup>2</sup>. Cement or mineral based substrates must be prepared mechanically using abrasive blast cleaning or scarifying equipment to remove cement laitance and to achieve an open textured surface. Loose friable material and weak concrete must be completely removed and surface defects such as blowholes and voids must be fully exposed.

#### MIXING

Mix parts A+B (Ratio by weight A:B = 3:1) together for at least 3 minutes with a mixing spindle attached to a slow speed electric drill (max. 300 rpm) until the material becomes smooth in consistency and a uniform grey colour. Avoid aeration while mixing. Dispense the mixture into a clean container and mix for another 1 minute at low speed. Mix only that quantity which can be used within its pot life.

#### APPLICATION

Mixed **DRI-PATCH UA 80** should be carried in plastic bags to work area and contact with water avoided until the point of application. Mixed mortar should be applied within 25 minutes of mixing (@20°C).

Apply small quantities, approximately 3-8mm thick by pressing firmly into position and ensuring that all water is expelled from between the repair surfaces. Uncured material should be protected from scouring and displacement by moving water until cured.

Fixing of tiles, slip bricks, and other items: Apply **DRI-PATCH UA 80** into the wetted bond surfaces. Apply a 25mm thick sausage of **DRI-PATCH UA 80** onto the stem being fixed. Firmly press onto concrete with a twisting action to ensure complete material bed of the required thickness (usually 6 to 12mm). Thicker beds should be supported for 12 to 48 hours, to prevent slipping.

When using a thin layer adhesive, apply the mixed adhesive to the prepared surface with a spatula, trowel, notched trowel, or with hands protected by gloves. Use formwork when applying as a repair mortar.

<u>Bonding metal profiles onto vertical surfaces</u>: support and press uniformly using props or any necessary supports for at least 12 hours, depending on the thickness applied (not more than 5 mm). Once hardened, check the adhesion by tapping with a hammer.

#### TOOLS

Clean tools immediately with suitable solvent based cleaner.

#### **LIMITATIONS**

DRI-PATCH UA 80 resins are formulated to have low creep under permanent loading. However due to the creep behaviour of all polymer materials under load, the long term structural design load must account for creep. Generally the long term structural design load must be lower than 20-25% of the failure load. Please consult a structural engineer for load calculations for your specific application.

#### **HEALTH & SAFETY**

For information and advice on the safe handling, storage and disposal of chemical products, users shall refer to the most recent Material Safety Data Sheet containing physical, ecological, toxicological and other safety-related data.

#### LEGAL NOTE

The information, and, in particular, the recommendations relating to the application and end-use of these products, are given in good faith based on current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance to the manufacturer recommendations. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered. The user of the product must test the product's suitability for the intended application and purpose. The manufacturer reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request.